DOCUMENT RESUME

ED 372 624 FL 022 317

AUTHOR	Clarke, Candice
TITLE	Bilingual Academic and Career Education Services for Hispanic High School Students (Project BACES). Final Evaluation Report, 1992-93. OER Report.
INSTITUTION	New York City Board of Education, Brooklyn, NY. Office of Educational Research.
PUB DATE	13 Sep 93
CONTRACT	T003A90021
NOTE	60p.
AVAILABLE FROM	Office of Educational Research, Board of Education of the City of New York, 110 Livingston Street, Room 732, Brooklyn, NY 11201.
PUB TYPE	Reports - Evaluative/Feasibility (142) -- Tests/Evaluation Instruments (160)
EDRS PRICE	MF01/PC03 Plus Postage.
DESCRIPTORS	Academic Achievement; Bilingual Education; *Bilingual Education Programs; *Career Education; Career Guidance; Curriculum Development; English (Second Language); High Schools; High School Students; Instructional Materials; *Limited English Speaking; Parent Participation; Program Descriptions; *Program Effectiveness; *Program Evaluation; Questionnaires; Second Language Instruction; Spanish; Staff Development; *Transitional Programs
IDENTIFIERS	New York City Board of Education; *Project BACES NY

ABSTRACT

This report presents an evaluation of the Bilingual Academic and Career Education Services for Hispanic High School Students (Project BACES), an Elementary and Secondary Education Act Title VII-funded project in its third year of operation at DeWitt Clinton High School in the Bronx and George Washington High School in Manhattan. The project served a total of 652 students of limited English proficiency who were native speakers of Spanish. Participating students received instruction in English as a Second Language (ESL), native language arts (NLA), and content areas. Preoccupational training in business-, law-, and health-related careers was offered in Spanish. The project also included staff development activities, a parent's advisory committee, and ESL classes for parents and adult siblings of project students. An evaluation of Project BACES found that it met its objectives for career advisement, career development, American culture and citizenship, cultural heritage, curriculum development, and parental involvement. It partially met its objectives for content areas subjects, dropout prevention, and attendance. It failed to meet its objectives for ESL, NLA, and staff development for ongoing education. Recommendations on program improvement are included. Three appendixes include a list of instructional materials used, class schedules, staff questionnaires, and student questionnaires in both English and Spanish. (MDM)

ED 372 624

OER Report

Bilingual Academic and Career Education Services
for Hispanic High School Students
(Project BACES)
Transitional Bilingual Education Grant T003A90021-93
FINAL EVALUATION REPORT
1992-93

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Robert Tobias

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

FL022317

BEST COPY AVAILABLE

Bilingual Academic and Career Education Services
for Hispanic High School Students
(Project BACES)
Transitional Bilingual Education Grant T003A90021-93
FINAL EVALUATION REPORT
1992-93

Ms. Julia Sanchez, Project Director
1171 65th Street, Room 503
Brooklyn, NY 11219

NEW YORK CITY BOARD OF EDUCATION

Carol A. Gresser
President

Irene H. Impellizzeri
Vice President

Victor Gotbaum
Michael J. Petrides
Luis O. Reyes
Ninfa Segarra-Vélez
Dennis M. Walcott
Members

Andrea Schlesinger
Student Advisory Member

Ramon C. Cortines
Chancellor

9/13/93

It is the policy of the New York City Board of Education not to discriminate on the basis of race, color, creed, religion, national origin, age, handicapping condition, marital status, sexual orientation, or sex in its educational programs, activities, and employment policies, and to maintain an environment free of sexual harassment, as required by law. Inquiries regarding compliance with appropriate laws may be directed to Mercedes A. Nesfield, Director, Office of Equal Opportunity, 110 Livingston Street, Room 601, Brooklyn, New York 11201, Telephone: (718) 935-3320.

BEST COPY AVAILABLE

EXECUTIVE SUMMARY

Bilingual Academic and Career Education Services (Project BACES) was an Elementary and Secondary Education Act (E.S.E.A.) Title VII-funded project in its third year of operation at DeWitt Clinton High School in the Bronx and George Washington High School in Manhattan. In the year under review, 1992-93, Project BACES served 652 students of limited English proficiency (LEP) who were native speakers of Spanish. Participating students received instruction in English as a second language (E.S.L.), native language arts (N.L.A.), and in the content areas. Preoccupational training in business-, law-, and health-related careers was offered in the students' native language. Multicultural education was an integral part of programming. Classes in art, music, and physical education were offered in the mainstream so as not to isolate project participants from their English dominant peers.

Participating staff had the opportunity to attend regularly scheduled staff development workshops. The project also reimbursed tuition fees for staff taking bilingual and E.S.L. education courses at the undergraduate or graduate level.

Project BACES sought to establish an active parental component, which included a Parent's Advisory Committee (PAC) and E.S.L. classes for parents and adult siblings of project students.

Project BACES met its objectives for career advisement, career development, American culture and citizenship, cultural heritage, improvement in attitude toward school, staff awareness of pupils' problems and needs, curriculum development, and parental involvement. It partially met its objectives for content area subjects, dropout prevention, and attendance. Project BACES failed to achieve its objectives for E.S.L., N.L.A., and staff development for ongoing education.

The conclusions, based on the findings of this evaluation, lead to the following recommendations:

- Explore reasons why student outcomes on the LAB fell below expected levels and reassess or develop alternative E.S.L. instructional strategies to increase students' English language achievement.

- Explore alternative techniques for N.L.A. instruction, including more intensive strategies at the literacy and beginning levels.

- Adapt content area instructional approaches found to be successful in one area to those subjects in which students were less successful.

- Assess reasons for lower than expected attendance rates and higher than expected dropout rates at George Washington High School and attempt to rectify the situation.

- Determine the reasons behind the failure of the expected number of project staff to enroll in college or university-level courses. Explore means of increasing the incentive of project staff to participate in such courses.

- Investigate the reasons for the low rate of parental attendance at open school day/evening at DeWitt Clinton High School and develop strategies to rectify this problem.

ACKNOWLEDGEMENTS

This report has been prepared by the Bilingual, Multicultural, and Early Childhood Evaluation Unit of the Office of Educational Research. Thanks are due to Ms. Candice Clarke for collecting the data and writing the report.

Additional copies of this report are available from:

Dr. Tomi Deutsch Berney
Office of Educational Research
Board of Education of the City of New York
110 Livingston Street, Room 732
Brooklyn, NY 11201
(718) 935-3790 FAX (718) 935-5490

TABLE OF CONTENTS

		PAGE
I.	INTRODUCTION	1
	Project Context	1
	Student Characteristics	2
	Project Objectives	5
	Project Implementation	6
	Parent and Community Involvement Activities	12
II.	EVALUATION METHODOLOGY	13
	Evaluation Design	13
	Instruments of Measurement	14
	Data Collection and Analysis	15
III.	FINDINGS	18
	Participants' Educational Progress	18
	Former Participants' Academic Progress in English Language Classrooms	26
	Overall Educational Progress Achieved Through Project	26
	Case History	31
	Staff Development Outcomes	31
	Curriculum Development Outcomes	33
	Parental Involvement Outcomes	33
IV.	SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	35
	Achievement of Objectives	35
	Most and Least Effective Components	35
	Recommendations to Enhance Program Effectiveness	36
	APPENDIX A Instructional Materials	37
	APPENDIX B Class Schedules	41
	APPENDIX C Likert Scales	42

LIST OF TABLES

		PAGE
TABLE 1	Number of Students in Project BACES, by Site	3
TABLE 2	Students' Countries of Origin	4
TABLE 3	Project Staff Qualifications	9
TABLE 4	Qualifications of Non-Title VII Staff	10
TABLE 5	Pretest/Posttest N.C.E. Differences on the Language Assessment Battery (LAB), by Site	20
TABLE 6	Pretest/Posttest N.C.E. Differences on El Examen de Lectura en Español (ELE), by Site	22
TABLE 7	Passing Grades in Content Area Courses, by Site	24

I. INTRODUCTION

This report documents the Office of Research, Evaluation, and Assessment's (OREA's) evaluation of the Elementary and Secondary Education Act (E.S.E.A.) Title VII-funded project, Bilingual Academic and Career Education Services for Hispanic High School Students (Project BACES).

PROJECT CONTEXT

The program operated at DeWitt Clinton High School in Manhattan and George Washington High School in the Bronx.

DeWitt Clinton High School was located in an ethnically diverse community composed of Latinos, African-Americans, Asian-Americans, and European-Americans. At DeWitt Clinton High School, the student population of 3,331 was made up of 52 percent Latino, 42 percent African-American, 1 percent European-American, less than 1 percent Asian-American, and less than 1 percent Native American. Nine percent of those enrolled were limited English proficient (LEP) students and 54 percent came from low-income families, as evidenced by their eligibility for the free-lunch program.

Constructed in 1929, DeWitt Clinton High School was in excellent condition, amid scenic campus grounds. Hallways were clean and well-lit, and walls were decorated with students' artwork. Bulletin boards advertised campus events. Classrooms were spacious, facilities were in good condition, and classroom walls displayed maps, posters, and evidence of students' art and written work.

The population of the community surrounding George Washington High School was mostly Latino, African-American, European-American, and Asian-American. Many residents were recent immigrants and were from low income households.

The student population at George Washington High School for the year under review reflected the diversity of the surrounding community. Of the 3,896 students registered, 89 percent were Latino, 10 percent were African-American, approximately 1 percent were European- or Asian-American. Forty-three percent of the students enrolled were LEP and 57 percent came from low-income families, as indicated by their eligibility for free lunch.

George Washington High School was situated in a somewhat dilapidated building constructed in 1925. The grounds surrounding the school were pleasant and unlittered. Inside, hallways--although noisy and crowded--were clean. Only a few examples of students' work or school activities were in evidence. Classrooms, on the other hand, displayed numerous examples of students' work along with maps and posters in both English and Spanish. Overall, classrooms were clean, bright, and had adequate facilities to accommodate all students.

STUDENT CHARACTERISTICS

Project BACES served Spanish-speaking LEP students in ninth through twelfth grade. (See Table 1.) Scores at or below the 40th percentile on the Language Assessment Battery (LAB) determined LEP status. Project participants were also selected on the basis of recommendations from teachers, personal interviews, and a review of students' academic records. Newly arrived students--recent immigrants to the United States--who met the admission criteria were also eligible to enter the program.

TABLE 1

Number of Students in Project BACES, by Site

Site	Grade				Total
	9	10	11	12	
DeWitt Clinton High School	26	61	63	45	195
George Washington High School	272	135	43	7	457
Total	298	196	106	52	652

Participants in the project generally had little or no formal education in their homeland. Many were from poor, rural areas and had immigrated for political and economic reasons. Approximately three percent of the program participants at DeWitt Clinton High School lacked literacy skills in their native language; at George Washington High School, 25 percent of the student participants lacked literacy in their native language.

The project served a total of 652 students; male students numbered 346 (53.1 percent) and female 306 (46.9 percent). Spanish was the native language of all students enrolled in the program. The majority of participants (89.3 percent) were born in the Dominican Republic. (See Table 2.) All participants came from low-income families and were eligible for the free-lunch program.

TABLE 2

Students' Countries of Origin

Country	Number of Students
Dominican Republic	582
Puerto Rico	21
United States	15
Ecuador	8
Mexico	8
Guatemala	4
Honduras	4
Peru	3
El Salvador	2
Chile	1
Colombia	1
Costa Rica	1
Nicaragua	1
Panama	1
Total	652

Needs Assessment

A student needs assessment--asking students to identify how many years of education they had had in their country of origin, the amount of time they had been in the United States educational system, the subjects in which they experienced the greatest success and difficulty, and their career aspirations--was conducted at both school sites. As a result, four primary needs were identified:

- to provide intensive English as a second language (E.S.L.), native language arts (N.L.A.) and content area instruction, with mainstreaming as an objective;

- to provide the resources that would allow project students to undertake a systematic exploration of bilingual careers and to encourage them to acquire practical skills, graduate, and go on to college;

- to provide project staff with staff development activities related to bilingual educational strategies; and

- to provide an E.S.L./parent training program, as well as information pertaining to Adult Education Programs offered by the New York City Board of Education, with the aim of increasing parents' understanding of this country's educational system and their participation in their children's education.

PROJECT OBJECTIVES

Student Objectives

- Seventy percent of the target students will demonstrate an appropriate increase in English proficiency as indicated by results on the Language Assessment Battery (LAB).

- Seventy-five percent of the target students will demonstrate an appropriate increase in Spanish language achievement as indicated by results on El Examen de Lectura en Español (ELE).

- At least seventy percent of all target students will score at or above the passing criterion of 65 in the subject areas--social studies, mathematics, and science.

- All graduating students will meet with the bilingual career specialists, bilingual grade advisors, or bilingual guidance counselors for advisement at least three times during the school year.

- The program will organize at least one conference for students in which representatives of business and industry will present information on career options and skills requirements.

- The program will organize at least two field trips for the targeted students at both school sites to historical museums, the United Nations, the White House, etc. to increase their familiarity with American culture and citizenship.

- Seventy-five percent of all target students will demonstrate an improvement in attitude towards one's cultural heritage as indicated by results on an OREA-developed Likert scale.

- Seventy-five percent of all target students will demonstrate an improvement in attitude towards school, as indicated by results on a 5-point scale inventory measuring students' interest in continuing education beyond their present grade.

- Program students will have significantly lower dropout rates than similar non-program students.

- As a result of participating in the program, students' attendance will be significantly higher than that of mainstream students.

Staff Development Objectives

- Eighty percent of the staff in the program will demonstrate an increase in awareness of pupil needs and pupil problems as indicated by a 5-point scale of problems and needs inventory.

- Ninety percent of program staff members will enroll in at least one university course each semester.

Curriculum Development Objective

- By the third project year, the curriculum specialists will have developed or translated one subject-matter oriented instructional unit for teaching (E.S.L., mathematics, science, and social studies.)

Parental Involvement Objective

- The proportion of program students' parents who participate in Open School Day/Evening will be equal to or greater than the proportion of mainstream students' parents who participate in this activity.

PROJECT IMPLEMENTATION

During the 1992-93 school year, Project BACES provided E.S.L, N.L.A., and content area instruction, as well as career guidance and field trips. The project's main goals were to assist Spanish-speaking LEP students to achieve their educational and

occupational aspirations by providing E.S.L., N.L.A., and content area instruction and support services, as well as career development and preoccupational training. Additionally, Project BACES included activities that would increase students' appreciation for both their native and American culture.

At both schools, content area subjects were taught in Spanish for 90 percent of the period and in English for the remaining 10 percent.

Project staff took part in weekly and monthly staff development meetings, workshops, and conferences; developed content-area curricula for LEP students; and enrolled in college courses for which they received reimbursement.

Project BACES offered project students' parents the opportunity to participate in various activities, including a Parents' Advisory Committee (PAC) and afternoon or evening E.S.L. classes.

Materials, Methods, and Techniques

At DeWitt Clinton High School, project students were enrolled in E.S.L. on beginning to transitional levels and in N.L.A. on beginning to advanced placement levels. Project BACES students at George Washington High School were enrolled in E.S.L. and N.L.A at the literacy and beginning levels.

A diagnostic-prescriptive approach helped to determine students' placement at the appropriate language competency level. Content area subjects were taught in the students' native language with supplementary vocabulary enrichment in English; occupational instruction was given in the students' native language.

Teachers of participating students employed a variety of strategies and techniques. At DeWitt Clinton, content-based, integrated/inter-disciplinary curriculum, cooperative learning, computer-assisted instruction (C.A.I.), and peer tutoring were among the major E.S.L. and N.L.A. instructional strategies.

E.S.L. and N.L.A. teachers at George Washington High School relied upon the language experience approach, which draws upon students' own experience and oral repertoire, as well as on individual and group peer tutoring and C.A.I.

The project incorporated a strong cultural component into the curriculum in order to foster knowledge of students' native culture and to promote an understanding of the different cultures represented by participants.

During the 1992-93 school year, Project BACES developed a pamphlet in Spanish, describing the philosophy, goals, and design of the program, and disseminated it to parents, school staff, community agencies, and others.

For a list of instructional materials used in the project, please see Appendix A.

Capacity Building. Next year, both high schools plan to assume the full cost of programming.

Staff Qualifications

Title VII staff. The project director and two educational assistants were fully funded by Title VII. Two resource specialists were partly funded by Title VII and partly by either tax levy or Chapter 1 funds. For a description of degrees held and

language competencies (teaching or communicative proficiency*), see Table 3. The project director, both resource specialists, and both educational assistants were native speakers of Spanish.

TABLE 3

Program Staff Qualifications

Position Title	Degree(s)	Language Competence
Project Director	M.A.	Spanish (TP)
Resource Specialist	M.A.	Spanish (TP)
Resource Specialist	B.A., M.S.	Spanish (TP)
Educational Assistant	A.A.	Spanish (TP)
Educational Assistant	High School	Spanish (TP)

The project director was responsible for the overall administration and supervision of the project. Her duties included supervising instructional and administrative staff; directing the activities of staff personnel; informing project staff, parents and teachers of the goals of the project; planning workshops for project staff; ensuring the involvement of parents and the community in the project; and providing evaluation data. The director had more than 15 years of experience in the field of bilingual education.

---

*Teaching proficiency (TP) is defined as the ability to use LEP students' native language in teaching language arts or other academic subjects. Communicative proficiency (CP) is defined as a non-native speaker's basic ability to communicate and interact with students in their native language.

The resource specialists were responsible for the implementation of the program at each school site. This included developing curricula materials; organizing parent-teacher conferences; planning staff development activities; acting as a liaison between students, teachers, parents, and the project director; and offering academic and personal guidance and career counseling to project students. Both resource specialists had over four years of experience in the field.

The educational assistants' responsibilities were to assist the resource specialist with the administration of the project by scheduling appointments with students, completing student data forms, providing supplementary content area instruction, and assisting non-project staff members in project students' classes. Each educational assistant had at least two years of experience in the field.

Other staff. Tax-levy funds paid the salaries of the project coordinator, 60 classroom teachers, 7 paraprofessionals, and a guidance counselors. (See Table 4.)

TABLE 4

Qualifications of Non-Title VII Staff

Position Title	Degree(s)	Language Competence
Project Coordinator	P.D.	Spanish TP French TP
Teachers (60)	Master's 29 Bachelor's 31	Spanish TP 54
Guidance Counselor	*	*
Paraprofessionals (7)	*	*

*Information not provided.

The project coordinator was responsible for the implementation of the program at each school site. Duties included determining appropriate instructional materials, developing additional bilingual materials as needed, and coordinating activities for staff and parents.

Teachers had from one to six years of experience in teaching LEP students. Twenty had received training in either bilingual education or E.S.L. All teachers held high school certification for the subject area they taught.

Staff development. Tuition assistance for bilingual or E.S.L. college or university courses was provided to project staff members. Teachers of participating students also took part in a series of weekly and monthly activities organized by the project director and the resource specialists at each project site. Workshops focused on E.S.L. and bilingual content area methodologies, multicultural education, and the specific problems and needs of LEP students.

Instructional Time Spent on Particular Tasks

See Appendix B for examples of class schedules.

Length of Time Participants Received Instruction

Students had a mean of 6.8 years (s.d.=1.5) of education in a non-English-speaking school system and 2.6 years (s.d=1.5) of education in the United States. The median amount of time students participated in Project BACES was 10 months.

Activities to Improve Pre-referral Evaluation Procedures for Exceptional Children

At both DeWitt Clinton and George Washington High Schools, teachers referred students thought to be experiencing academic or social difficulties to the School-

Based Support Team (S.B.S.T.) for evaluation. At DeWitt Clinton High School, the S.B.S.T. had a social worker, a school psychologist, and an educational evaluator who were proficient in Spanish. At George Washington High School, two S.B.S.T. members were proficient in Spanish.

Instructional Services for Students with Special Needs

Project staff reported that there were no disabled students in Project BACES. Project students at DeWitt Clinton High School received assistance in E.S.L., N.L.A., and content area courses with project staff in the Title VII Resource Room. Many students came to the Resource Room for peer tutoring, individual help with particular areas of difficulty, and preparing for tests. At George Washington High School, project students received additional tutoring and instruction in English, mathematics, geography, history, and science three times a week as part of the P.M. school.

PARENT AND COMMUNITY INVOLVEMENT ACTIVITIES

The project sponsored a wide variety of parental and community involvement activities that included a PAC, afternoon and evening E.S.L. classes, and parent training workshops. Project staff also encouraged parents to participate in schoolwide and bilingual open school day/evening events.

II. METHODOLOGY

EVALUATION DESIGN

Project Group's Educational Progress as Compared to That of an Appropriate Non-Project Group

OREA used a gap reduction design to evaluate the effect of bilingual language instruction on project students' performance on the standardized tests. Because of the difficulty of finding a valid comparison group, OREA used instead the groups on which the tests were normed. Test scores are reported in Normal Curve Equivalents (N.C.E.s), which are normalized standard scores with a mean of 50 and a standard deviation of 21.1. It is assumed that the norm group had a zero gain in N.C.E.s in the absence of supplementary instruction and that participating students' are attributable to project services.

Applicability of Conclusions to All Persons Served by Project

Data were collected from all participating students for whom there were pre- and posttest scores. (There were no posttest data on students who entered the program late, therefore posttest data for them will serve as pretest data for the following year.) Instruments used to measure educational progress were appropriate for the students involved. The LAB and El Examen de Lectura en Español (ELE) are used throughout New York City to assess growth in English and Spanish skills in populations similar to those served by Project BACES.

INSTRUMENTS OF MEASUREMENT

OREA compared pre- and posttest scores on the LAB to assess the E.S.L. objective and the ELE to assess the N.L.A. objective. The content area objective in mathematics, science, and social studies was assessed through course grades, as specified.

All students were tested at the level that was appropriate for their grade placement. The language of the LAB and ELE was determined by the test itself.

According to the publishers' test manuals, all standardized tests used to gauge project students' progress are valid and reliable. Evidence supporting both content and construct validity is available for the LAB. Content validity is confirmed by an item-objective match and includes grade-by-grade item difficulties, correlations between subtests, and the relationship between the performance of students who are native speakers of English and students who are LEP. To support reliability, the Kuder-Richardson Formula 20 (KR20) coefficients and standard errors of measurement (SEM) are reported by grade and by form for each subtest and total test. Grade reliability coefficients, based on the performance of LEP students on the English version, ranged from .88 to .96 for individual subtests and from .95 to .98 for the total test.

El Examen de Lectura en Español (ELE) was prepared by New York City educators who were native speakers of Spanish and represented several Latino linguistic and cultural groups. The ELE was administered in two forms to all New York City students who were receiving language arts instruction in Spanish. For

form 1, the grade reliability coefficients ranged from .94 to .96. Comparable data for form 2 will be generated as soon as possible after its administration in the spring of 1993. Items on the test were grade-specific. Construct validity is evidenced by grade-to-grade decreases in item difficulty within level. This characteristic reflects the acquisition of increased amounts of the underlying construct (reading proficiency) as students progress through the grades.

To assess the growth of cultural pride, OREA developed a Likert-type questionnaire which project personnel administered to all participating students. (See Appendix C.)

To assess the improvement in project participants' attitude towards school, OREA developed a Likert-type questionnaire which project personnel administered to all participating students. (See Appendix C.)

To assess the staff awareness objective, an OREA-developed questionnaire was administered to all participating staff. (See Appendix C.)

DATA COLLECTION

To gather qualitative data, an OREA evaluation consultant carried out on-site and telephone interviews of the project director and project coordinator several times during the school year and also observed two classes on each of two visits. The project evaluator collected the data and prepared the final evaluation report in accordance with the New York State E.S.E.A. Title VII Bilingual Education Final Evaluation Report format, which was adapted from a checklist developed by the staff of the Evaluation Assistance Center (EAC) East in consultation with the Office of

Bilingual Education and Minority Language Affairs (OBEMLA).

Proper Administration of Instruments

Qualified personnel received training in testing procedures and administered the tests. Testers followed guidelines in the administration manuals accompanying standardized tests. Time limits for students were adhered to; directions were given exactly as presented in the manuals.

Testing at 12-Month Intervals

Standardized tests were given at 12-month intervals, following the published norming dates.

Data Analysis

Accurate scoring and transcription of results. Scoring, score conversions, and data processing were accomplished electronically by the Scan Center of the Board of Education of the City of New York. Data provided by the Scan Center were analyzed in the Bilingual, Multicultural, and Early Childhood Evaluation Unit of OER. Data collectors, processors, and analysts were unbiased, with no vested interest in the success of the project.

Use of analyses and reporting procedures appropriate for obtained data. To assess the proportion of students achieving skills in English and Spanish, OER computed the percentages of students showing gains on the LAB and on ELE. To evaluate the significance of students' achievement in English and in Spanish, OER computed a correlated *t*-test on LAB and ELE N.C.E. scores. The *t*-test determined whether the difference between the pre- and posttest scores was significantly greater

than would be expected by chance variation alone.

The only possible threat to validity of any of the above instruments might be that LAB norms were based on the performance of English proficient (EP) rather than LEP students. Since OER was examining gains, however, this threat was inconsequential——the choice of norming group should not affect the existence of gains.

III. FINDINGS

PARTICIPANTS' EDUCATIONAL PROGRESS

Project BACES carried out all instructional activities specified in its original design.

Participants Progress in English

Throughout the school year, students had ample opportunity to develop their English language skills.

An OREA evaluation consultant observed an intermediate level E.S.L. class held at DeWitt Clinton High School. The lesson began with the teacher writing a number of anagrams on the blackboard. Students were required to unscramble or to supply the missing letters in order to complete the word. Students responded to the teacher's requests in English and were subsequently asked to define in English the vocabulary words written on the blackboard. This activity took place for approximately 15 minutes.

The next part of the lesson consisted in a teacher-led group discussion about the environment. Students were asked to voice their concerns about the environment and mentioned such factors as air pollution, contaminated water, and ozone depletion. This discussion formed the background for the next portion of the lesson, in which students were asked to read an article in *Cause and Effect* which discussed problems in the environment and the activities of Greenpeace. Each paragraph was read slowly out loud by both teacher and students. After reading each paragraph, the teacher asked students to demonstrate their comprehension of

the reading by asking questions about the causes of air pollution, the development and deployment of nuclear weapons, and the effects of fallout.

The teacher followed this oral reading comprehension exercise with a brief lecture on the differences between biodegradable and nonbiodegradable objects. The last part of the class was devoted to a group discussion of recycling as a way to combat environmental pollution, which began with the teacher relating an anecdote about a group of high school students who organized demonstrations and waged a successful campaign against the use of styrofoam lunch containers in the school cafeteria. For homework, students were asked to write brief responses to questions relating to issues discussed in the article which had not been addressed during the class period.

The evaluation objective for E.S.L. was:

- Seventy percent of the target students will demonstrate an appropriate increase in English proficiency as indicated by results on the Language Assessment Battery (LAB).

There were complete pre- and posttests on the LAB for 444 students in grades nine through twelve. (See Table 5.) The average gain of 4.7 N.C.E.s (s.d.=9.5) was statistically significant ($p<.05$). However, only 50.9 percent of the students for whom data were available showed an increase from pre- to posttest scores.

The project did not meet its E.S.L. objective this year. Last year, the project also failed to meet this objective.

TABLE 5

Pretest/Posttest N.C.E. Differences on the
Language Assessment Battery (LAB), by Site

High School	Total number of project students	Number of students for whom data were available	Pretest		Posttest		Difference		*t* value
			Mean	S.D.	Mean	S.D.	Mean	S.D.	
George Washington	457	304	3.3	6.6	6.9	8.0	3.6	8.4	7.46*
DeWitt Clinton	195	140	13.6	13.2	20.7	16.6	7.1	11.3	7.40*
Total	652	444	6.5	10.4	11.2	13.1	4.7	9.5	10.36*

*$p < .05$

- Overall and at both sites, Project BACES students made a significant gains on the LAB.

Participants' Progress in Native Language Arts

The evaluation objective for N.L.A. was:

- Seventy-five percent of the target students will demonstrate an appropriate increase in Spanish achievement as indicated by results on El Examen de Lectura en Español (ELE).

There were complete pre- and posttest scores on the ELE for 14 students from grades nine through twelve. (See Table 6.) There was a mean loss of 2.5 N.C.E.s (s.d.=23.6). Overall, 64.3 percent of the students demonstrated an increase from pre- to posttest scores. It must be recognized that a very small proportion of students had both pre- and posttest scores.

As had occurred last year, Project BACES did not meet its N.L.A. objective.

LEP Participants' Academic Achievement

Teachers used Spanish in content area classes for 90 percent of the period and conducted classes in English for the remaining 10 percent. A wide array of content area instructional techniques were used, including cooperative learning, peer tutoring, and computer-assisted instruction.

An OREA evaluation consultant observed a grade 10 mathematics class at George Washington High School. The objective of the lesson was to learn how to reduce algebraic fractions. In the first exercise, which was conducted by the teacher on the blackboard, students were asked in Spanish to factor the following algebraic expressions: $6x^2 - 9xy$; $y^2 - 8y + 15$. After allowing students a short time to complete these problems in their workbooks, the teacher selected students to write their calculations on the blackboard.

TABLE 6

Pretest/Posttest N.C.E. Differences on
El Examen de Lectura en Español (ELE), by Site

High School	Total number of project students	Number of students for whom data were available	Pretest		Posttest		Difference		*t* value
			Mean	S.D.	Mean	S.D.	Mean	S.D.	
George Washington	457	8	20.5	7.2	33.5	16.8	-5.0	30.5	-0.46
DeWitt Clinton	195	6	19.0	12.1	19.8	17.7	0.8	11.2	0.18
Total	652	14	30.1	19.5	27.6	17.9	-2.5	23.6	-0.40

*$p<.05$

- Overall and at one site, students showed a substantial decrease on the ELE between pretest and posttest.

Following this exercise, students were asked in English to reduce the following fractions to their lowest terms: 15/20; 51/63; 24/32. After students had successfully completed this exercise, the teacher wrote key words such as fraction, lowest common denominator, numerator etc., on the blackboard in Spanish.

These exercises were followed by a period of approximately 15 minutes during which students worked individually to answer ten algebraic problems from the text *Integrated Math Course I*. The problems assigned were written on the blackboard by the teacher, and students either volunteered or were asked to complete them. Since several students had difficulty with the exercise, the teacher gave a brief explanation in English of how to reduce a fraction by dividing both numerator and denominator by the maximum divisor. Students asked the teacher to explain how to reduce algebraic terms which contained exponents. This was done both through verbal instruction and a written example on the blackboard.

In the remainder of the lesson, students worked in pairs or groups of three to complete a teacher-assigned algebraic fractions worksheet.

The content area objective was:

- At least 70 percent of all target students will score at or above the passing criterion of 65 in the subject areas--social studies, mathematics, and science.

Only for social studies in the spring at DeWitt Clinton High School and in science both semesters at George Washington High School did at least 70 percent of the students receive passing grades. (See Table 7.)

Project BACES partially met its objective for the content area subjects of mathematics, science, and social studies as it did last year.

TABLE 7

Content Areas Final Grade

Site	Subject	Fall 1992		Spring 1993	
		Number of students for whom data were reported	Percent Passing	Number of students for whom data were reported	Percent Passing
DeWitt Clinton High School	Math	89	58.4	134	64.2
	Science	61	63.9	55	65.5
	Social Studies	103	65.0	148	74.3
George Washington High School	Math	288	51.0	288	46.2
	Science	22	77.3	25	72.0
	Social Studies	212	62.3	219	69.4

- Except in social studies one semester at DeWitt Clinton High School and science at George Washington High School, passing rates were low.

Career Development

Participating students at DeWitt Clinton High School met regularly with the bilingual guidance counselor during the school year. In conjunction with the school college counselor, bilingual seniors were given the opportunity to participate in school-sponsored trips to several colleges. Two college workshops were organized by the bilingual guidance counselor, and the New York City Police Department gave a presentation at the school in the fall of 1992. In the spring of 1993, two bilingual engineers from the Society of Dominican Engineers gave a presentation to project students. Project students and their families also attended a Latino Career and Education Day for high school students held at City College of the City University of New York (CUNY) in March, 1993. Several health careers students also participated in "Tech. Prep.," a special program for tenth grade health career majors.

At George Washington High School, senior project students received career counseling from the school's college bilingual specialists or the bilingual guidance counselor several times throughout the school year. Project BACES staff helped senior students to complete college applications, write personal statements, and apply for college financial aid. BACES students at this site also participated in a day-long conference with "Coop. Tech." and Job Corps representatives. Several project students also took part in "New York Working," a program in which students receive training in office work, computers, and peer-tutoring.

The evaluation objectives for career advisement was:

- All graduating students will meet with the bilingual career specialists for advisement at least three times during the school year.

Project BACES met its objective for career advisement, which was also achieved in the previous year.

The career development objective was:

- The program will organize at least one conference for students in which representatives of business and industry will present information on career options and skills requirements.

The project met its objective for career development, as it did in the previous year.

FORMER PARTICIPANTS' PROGRESS IN ENGLISH LANGUAGE CLASSROOMS

Information on former project students was not available.

OVERALL EDUCATIONAL PROGRESS ACHIEVED THROUGH PROJECT

American Culture and Citizenship

Project BACES students at each school had the opportunity to participate in several field trips designed to acquaint them with various aspects of life in the United States. Students at DeWitt Clinton High School visited Bear Mountain State Park, the Bronx Zoo, Rockefeller Center, the National Theater for Performing Arts, the Air-Sea-Space Museum on the U.S.S. Intrepid, and Saint Patrick's Cathedral. Several project students at DeWitt Clinton High School also participated in an innovative nationwide citizenship program called "Close-Up for New Americans." This weeklong program

allowed high school students who had recently immigrated to the United States to receive intensive instruction in the history of American government and to visit the Capital, the House of Representatives, and other sites in Washington, D.C. George Washington High School project students also visited various historic sites in Washington, D.C.

The project proposed one objective with respect to increasing students' appreciation of American culture and citizenship:

- The program will organize at least two field trips for the targeted students at both school sites to historical museums, the United Nations, the White House, etc. to increase their familiarity with American culture and citizenship.

Project BACES met its objective for American culture and citizenship at both school sites, as it did in the previous year.

Cultural Heritage

In order to instill pride in each student for his or her own culture as well as sensitivity to the culture of others, multicultural education was made an integral part of Project BACES. At both sites, the Title VII offices displayed numerous Spanish magazines and newspapers, and other information relating to Latino cultural traditions. In the fall of 1992, project students at DeWitt Clinton High School participated in a Puerto Rican heritage festival, while a Dominican festival was held in spring 1993. Both festivals featured dance, music, comedy skits, and poetry. Project students at DeWitt Clinton High School also participated in the Columbus Quincentenary celebrations held at Manhattan Community College in the fall of 1992, while in spring 1993, an N.L.A. literacy contest and a "salsarengue" dinner and dance

was held for all students in the program. Project students at DeWitt Clinton High School also went to see El Repertorio Español's production of *La Casa de Bernarda Alba*.

Cultural activities for project students at George Washington High School included Dominican Independence week and Pan American week, both of which took place in spring 1993, and an International Dinner for students, parents, and staff, also held in spring 1993. To further their appreciation of Latino culture, project students took a field trip to the Repertorio Español to see the Spanish play, *Cafe con Leche*. In addition to these activities, George Washington High School housed a number of community-based organizations such as Alliance Dominicana, in which several project students participated.

The project proposed one objective for students' appreciation of their cultural heritage:

- Seventy-five percent of all target students will demonstrate an improvement in attitude towards one's cultural heritage as indicated by results on an OREA-developed Likert scale.

OREA developed student surveys in English and Spanish to assess the growth of cultural pride. Of the 491 completed questionnaires returned to OREA, 99.4 percent indicated an increase in appreciation of cultural heritage.

The project met its objective for appreciation of cultural heritage, as it had done last year.

Attitude Towards School

Project BACES proposed the following objective for attitude towards school:

- Seventy-five percent of all target students will demonstrate an improvement in attitude towards school as indicated by their responses on an OREA-developed Likert scale measuring interest in continuing education beyond their present grade.

OREA developed student surveys in English, Spanish, and Chinese, in order to assess the improvement in students' attitude towards school. Based on the 491 completed questionnaires returned to OREA, 99 percent of students surveyed reported an improvement in their attitude towards school.

As it did last year, the project met its objective for attitude towards school.

Grade Retention

Project BACES did not propose any objectives for grade retention.

Two hundred fifty-seven participating students (39.4 percent) were retained in grade. Last year, 205 students (31 percent of participants) were retained in grade.

Dropout Prevention

Project staff at both sites were actively involved in monitoring at-risk students' attendance, lateness, and behavior in school. They wrote letters and made telephone calls to parents when necessary. In addition, individual and group counseling was provided in order to motivate students to stay in school.

Project BACES proposed the following dropout prevention objective:

- Program students will have significantly lower dropout rates than similar non-program students.

The dropout rate for project students at DeWitt Clinton High School was 1.0 percent, compared to a schoolwide dropout rate of 6.3 percent. At George Washington

High School, the dropout rate for participating students was 11.2, compared to a schoolwide rate of 9.2 percent.

As it had done last year, the project partially met its objective for dropout prevention, meeting it at DeWitt Clinton High School but not at George Washington High School.

Attendance

The project had one attendance objective:

- Program students will have significantly higher attendance rates than those of mainstream students.

Project BACES staff worked closely with attendance officers, teachers, and counselors to promote improved student attendance by increasing contact with parents through cards, letters, phone calls, and home visits. Counseling was offered to students who were absent excessively.

The attendance rate for project students at DeWitt Clinton high school was 92.0 percent, based on 151 students. This compared with a schoolwide attendance rate of 83 percent, and was significantly ($p<.05$) higher. At George Washington High School, the attendance rate for project students was 86.0 percent, based on 405 students. This compared with a schoolwide attendance rate of 84 percent. Although the rate for participating students was higher, the difference was not statistically significant.

The project partially met its attendance objective, meeting it at DeWitt Clinton High School, but failing to do so at George Washington High School. Last year, Project BACES also met its attendance objective only by DeWitt Clinton High School.

Placement in Gifted and Talented Programs

No students were placed in a program for the gifted and talented.

Enrollment in Postsecondary Education Institutions

Two students (0.3 percent of participants) will be attending college next year.

CASE HISTORY

R.D. is a graduating senior who has been in the program since its inception three years ago. When he arrived from the Dominican Republic as a sophomore, his English was very limited and his academic skills were poor. At first he did not attend the resource room on a regular basis and was failing most of his classes. A year ago he began to come consistently, sometimes two or three times a day for help in his classes. He was one of several students who applied to work for the New York City Police Department after their visit with BACES students in the fall of 1992.

Today R.D. has become a role-model for many students. With the help and encouragement of project staff, as well as E.S.L. and bilingual content area instructors, he has passed all his classes with good grades and has developed strong leadership skills. He will be attending Lehman College in September, 1993.

STAFF DEVELOPMENT OUTCOMES

Staff Development

Project personnel and teachers of participating students took part in a series of workshops designed to address the specific problems and needs of bilingual students. Workshops focused on cooperative learning, career orientation, curriculum

development, strategies to improve students' performance on the LAB, cultural differences, and LEP students' educational and economic backgrounds.

At DeWitt Clinton High School an average of five individuals attended each workshop. At George Washington High School an average of three staff attended each workshop.

The project proposed the following objective for staff awareness:

- Eighty percent of the staff in the program will demonstrate an increase in awareness of pupil needs and pupil problems.

OREA designed and distributed a Likert-type evaluation questionnaire to teachers and project staff. Of the 44 completed questionnaires submitted to OREA, 82 percent indicated that they had increased their awareness of LEP pupils' problems and needs.

Project BACES met its objective for staff awareness of pupil problems and needs. Last year, the project failed to meet this objective.

- Ninety percent of program staff members will enroll in at least one university course each semester.

During the 1992-93 school year, three out of six (50 percent) program staff members enrolled in college or university courses.

Project BACES did not meet the staff development objective for ongoing education. Last year, the project achieved this objective.

CURRICULUM DEVELOPMENT OUTCOME

Project BACES proposed the following curriculum development objective:

- By the third project year, the curriculum specialists will have developed or translated one subject-matter oriented instructional unit for teaching (E.S.L., mathematics, science, and social studies.)

Project staff at DeWitt Clinton High School developed curriculum materials for use in global studies and American history. They also adapted curriculum materials in biology, mathematics, E.S.L. and social studies for use with project students. At George Washington High School, project staff developed curriculum materials in mathematics, social studies, and E.S.L.

The project met its objective for curriculum development.

PARENTAL INVOLVEMENT OUTCOME

Each site established a PAC with approximately eight members per school. In addition, project personnel sent out a survey to all project students' parents to determine the best structure and time for a proposed E.S.L. class for parents. Using the results of the survey, E.S.L. classes were offered once a week for three hours per session. Unfortunately, few parents were regular participants, and as a consequence, this component of the project was cancelled after approximately three months.

Project staff were active in encouraging parents to take part in their children's education. Letters written in Spanish were sent to parents of project participants, informing them about parent-teacher conferences, bilingual education conferences, and open school day/evenings.

Project BACES proposed one parental involvement objective:

- The proportion of program students' parents who participate in Open School Day/Evening will be equal to or greater than the proportion of mainstream student's parents who participate in these activities.

At DeWitt Clinton High School, 28 percent of program students' parents attended Open School Day/Evenings, compared to schoolwide attendance rate of 25 percent. Attendance at Open School Day/Evenings at George Washington High School was 70 percent for program students' parents in comparison to only 35 percent for mainstream students' parents.

Project BACES met its objective for parental involvement at both sites, as it did last year.

IV. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

ACHIEVEMENT OF OBJECTIVES

Project BACES met its objectives for career advisement, career development, American culture and citizenship, cultural heritage, improvement in attitude towards school, staff awareness of pupils' problems and needs, curriculum development, and parental involvement. It partially met its objectives for content area subjects, dropout prevention, and attendance. Project BACES failed to achieve its objectives for E.S.L., N.L.A., and staff development for ongoing education.

Students in Project BACES made a moderate amount of academic progress. With respect to E.S.L., while the percentage of students showing improved scores on the LAB was not as great as anticipated, participating students did show statistically significant gains ($p < .05$). Scores on the ELE showed some improvement, with over 60 percent improving from pre- to posttest. However, despite these partial successes, many project students lacked the skills to advance to the next grade level, and thus over 39 percent of the project participants were retained in grade.

MOST AND LEAST EFFECTIVE COMPONENTS

Several components of Project BACES proved to be extremely effective. These included activities designed to increase students' awareness of their cultural heritage, their appreciation of American culture and citizenship, and the efforts of project staff to improve students' attitude towards school.

The least effective components of the project were E.S.L., N.L.A., content area

instruction, and staff development for ongoing education, and to some extent, parental involvement. With respect to parental involvement, although the project was successful in meeting its objective in that area, the rates of project-parent participation were considerably lower than they had been the previous project year, particularly at DeWitt Clinton High School.

RECOMMENDATIONS TO ENHANCE PROJECT EFFECTIVENESS

- Explore reasons why student outcomes on the LAB fell below expected levels and reassess or develop alternative E.S.L. instructional strategies to increase students' English language achievement.
- Explore alternative techniques for N.L.A. instruction, including more intensive strategies at the literacy and beginning levels.
- Adapt content area instructional approaches found to be successful in one area to those subjects in which students were less successful.
- Assess reasons for lower than expected attendance rates and higher than expected dropout rates at George Washington High School and attempt to rectify the situation.
- Determine the reasons behind the failure of the expected number of project staff to enroll in college or university-level courses. Explore means of increasing the incentive of project staff to participate in such courses.
- Investigate the reasons for the low rate of parental attendance at open school day/evening at DeWitt Clinton High School and develop strategies to rectify this problem.

APPENDIX A

Instructional Materials

E.S.L.

Grade	Title	Author	Publisher	Date of Publication
Elementary	Flash 1	de Pous	McGraw Hill	1990
Elementary	Flash 2	de Pous	McGraw Hill	1990
Secondary	Skill Sharpeners 1, 2	De Filipo, Skidmore	Addison Wesley	1991
Secondary	Structure Practice in Content 1	Maurer & Laporte	Longman	1989
Secondary	10 Steps (2nd Edition)	Brookest Withrow Inc.	Longman	1988
Secondary	Starting to Read	Mrowicki	Scott Foresman	1988
Secondary	Write on Cue	Kirchner	Prentice Hall/ Regents	1990
Secondary	Access	Molinsky & Bliss	*	1990
Secondary	The Pizza Tastes Good	Pickett	Prentice Hall/Regents	1988
Literacy	Listen First	Adelson-Goldstein	Oxford University Press	1991
Level 1	In Contact 1	Denmaneetal Rhat	Scott Foresman	1991
Levels 2-6	Lado English Series	Robert Lado	Prentice Hall	1990
Level 1	Side by Side	Molinsky	Prentice Hall	1989
Level 2	True Stories	Heyer	Longman	1990
Level 3	Facts and Figures	Ackert	Newbury	1986
Level 4	Cause and Effect	Ackert	Newbury	1986
Level 5	Modern Short Stories	Dixson	Prentice Hall	1984
Level 8	Globe Literature	Potter	Globe Book Co.	1990

*Information was not provided.

APPENDIX A

Instructional Materials, cont'd.

N.L.A.

Grade	Title	Author	Publisher	Date of Publication
Secondary	Leer y Escribir Hoy	Dean & Figueroa Uribe	Linmore Publisher	1990
Secondary	Palabras de Lucha y Alegría	Fauteux	New Readers Press	1990
Secondary	Mi Primera Fonética	Dorothy Sword Bishop	National Textbook	1990
Level 3-4	Aventuras de la Cuidad	Wald-Deren	Hougton-Mifflin	1973
Level 5-6	Galería Hispanica	Aday Abimi-Loebs	McGraw Hill Publishers	1979
Level 7-8	Lengua y Literatura	Playor	Palet e Peldez	1979
Level 7-8	Literatura Hispano-Americana	Gomez-Gil	Holt Rhinehart	1972
Level 7-8	Aventuras Literarias	Jarvis, Lebredo, Mena-Ayallon	D.C. Heath	1991

APPENDIX A

Instructional Materials, cont'd.

Mathematics

Grade	Title	Author	Publisher	Date of Publication
Secondary	Fundamentos de Matemáticas	Office of High School Bilingual Programs	N.Y.C. Board of Education	1989
7	Matemática Progresiva 7	Nelson Londono & Hernando Bedoya	Editorial Norma S.A.	1989
9	G.W.H.S. Whole Numbers Numeros Enteros	Barry Hauptman & Pablo Ramirez	Surr Curriculum Project	1992
Elementary & Secondary	Teacher-made Worksheet	Goozner	Amsco Publisher	1991
9	Matemáticas	Jose Diaz Cubero	Cultural Editora y Distribudora	1983
9	Matemáticas sin Limites	Francis Fennel & Robert Reyes	Holt, Rinehart	1988
10	Integrated Mathematics	Arnold, Webb, Dressler, & Keen	Amsco	1980
10	Achieving Competence in Math	Mandery & Schneider	Amsco	1987
9	Algebra	Baldor	Edime, Organizacion Gracia	1984
9-10	Matemáticas	Ordan & Vogeli	Silver Burdett Ginn Inc.	1989
9-10	Matemáticas Progresiva	Londono & Bedoya	Editorial Norma, S.A.	1985

APPENDIX A

Instructional Materials, cont'd.

Science

Grade	Title	Author	Publisher	Date of Publication
	La Materia y La Energia	Heimler & Price	Charles E. Merrill	1985
10	Beginning Scientific, 1	D.E. Royds-Irmak	Nelson	1978
10	Beginning Scientific, 2	D.E. Royds-Irma	Nelson	1979
9-10	Biology & Human Progress	Charles Tauzer	Prentice-Hall, Inc.	1986
9-10	The Health Care Worker	Shirly Badach	Prentice-Hall, Inc.	1988
11	Medical Assisting	Keir & Louise	Delmar Publishers	1989
11	The Medical Assistant	Betty Atkinson	Delmar Publishers	1976

Social Studies

Grade	Title	Author	Publisher	Date of Publication
10	Comprende tu Mundo	Kieloran, Zimmer & Janet	Jarrett Publishers	1991
9	La Constitución Cimientos De La Sociedad Norteamerican	N.Y.C. Board of Education	N.Y.C. Board of Education	1991
9	Historia del Antiguo Continente	Augusto Montenegro	Augusto Montenegro	1987
11	Nueva Historia de los Estados Unidos	Baker & Hall	Minerva Books	1986
11-12	Los Estados Unidos, Su Historia, Su Gobierno	Villoran, Jarrett & Zimmer	Jarrett Publishers	1992
12	Economía Para Todos	Sullivan		1976
9-12	Bilingual Glossary of Social Studies	N.Y.C. Board of Education	N.Y.C. Board of Education	1988

APPENDIX B

Class Schedules

Periods were 35 minutes long, and the day's schedule was the same Monday to Friday.

Period	Grade 9	Grade 10	Grade 11	Grade 12
1	N.L.A. Spanish	E.S.L. Tutorial	Physical Education	Human Biology 2 (Bil.)
2	E.S.L. 3	Group Counseling	N.L.A. Spanish	E.S.L. 4 Reading and Writing
3	Study Hall	Lunch	Social Studies (Bil.)	E.S.L. 3 Reading and Writing
4	Global History	Weight Training	Human Biology 2	Lunch
5	Physical Education	N.L.A. Spanish 2	Lunch	Advanced Placement Spanish
6	Lunch	E.S.L. Reading & Writing	N.L.A. Spanish	E.S.L. 4 Grammar
7	E.S.L. 3	E.S.L. 3 Grammar	E.S.L. 2 Grammar	Economics (Bil.)
8	Fundamental Math	Bilingual Sequential Math	E.S.L. 2 Reading & Writing	

APPENDIX C

LIKERT SCALES

BILINGUAL, MULTICULTURAL, AND EARLY CHILDHOOD EVALUATION
OFFICE OF RESEARCH, EVALUATION, AND ASSESSMENT
NEW YORK PUBLIC SCHOOLS
110 LIVINGSTON STREET, ROOM 732
BROOKLYN, N.Y. 11201
(718) 935-3790

Office of Research, Evaluation, and Assessment
Evaluating Programs For Our Future Leaders
Bilingual, Multicultural, and Early Childhood

Staff Awareness
Spring 1993

1 7
1 2

Program: **Project BACES**

Directions: Please write the numbers that show how you feel in the boxes on the right.

1. Since participating in Project BACES, to what degree have you become **more aware** of students' needs?

Not more aware at all	1	2	3	4	5	Extensively interested

☐ 3

2. Since participating in Project BACES, to what degree have you become **more aware** of students' problems?

Not more aware at all	1	2	3	4	5	Extensively interested

☐ 4

3. What is your overall assessment of the project?

Poor quality	1	2	3	4	5	Superior quality

☐ 5

4. List what you consider to be the three most significant needs/problems that students have.

_____

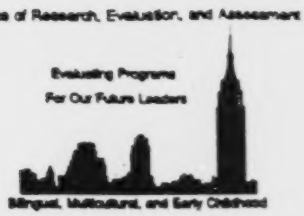
_____

_____

_____

Thank you very much for your assistance.

BILINGUAL, MULTICULTURAL, AND EARLY CHILDHOOD EVALUATION
OFFICE OF EDUCATIONAL RESEARCH
NEW YORK CITY PUBLIC SCHOOLS
110 LIVINGSTON STREET, ROOM 732
BROOKLYN, NY 11201
(718) 935-3790 FAX (718) 935-5490


Office of Research, Evaluation, and Assessment
Evaluating Programs
For Our Future Leaders
Bilingual, Multicultural, and Early Childhood

STUDENT ATTITUDE QUESTIONNAIRE

(Vocational Aspirations)
SPRING 1993

Program: **Project BACES** [1][7] (1 2)

Fecha: _____ MES [ ][ ] (3 4) DIA [ ][ ] (5 6)

¿En qué grado está usted? _____ [ ][ ] (7 8)

Instrucciones:	Por favor, escriba el número que mejor representa su opinión en los recuadros a la derecha.

1. ¿Cuánto aprendió usted acerca de diferentes empleos y carreras en el Proyecto BACES?

No aprendí nada — 1 2 3 4 5 — Aprendí mucho [ ] (9)

2. ¿Cree usted que el Proyecto BACES le ha hecho considerar una carrera en la cual no había pensado anteriormente?

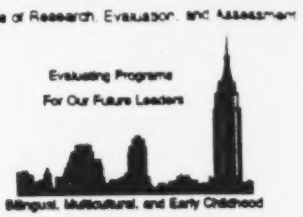
No, no me ha hecho considerar carrera diferente — 1 2 3 4 5 — Sí, me ha hecho considerar seriamente una carrera diferente [ ] (10)

3. ¿Piensa usted que el participar en el proyecto BACES lo ha hecho más entusiasta acerca de la carrera que va a empezar?

No me ha entusiasmado — 1 2 3 4 5 — Me ha entusiasmado mucho [ ] (11)

Muchas gracias por completar este cuestionario.

BILINGUAL, MULTICULTURAL, AND EARLY CHILDHOOD EVALUATION
OFFICE OF EDUCATIONAL RESEARCH
NEW YORK CITY PUBLIC SCHOOLS
110 LIVINGSTON STREET, ROOM 732
BROOKLYN, NY 11201
(718) 935-3790 FAX (718) 935-5490


Office of Research, Evaluation, and Assessment
Evaluating Programs
For Our Future Leaders
Bilingual, Multicultural, and Early Childhood

STUDENT ATTITUDE QUESTIONNAIRE

(Vocational Aspirations)

SPRING 1993

Program: **Project BACES** [1][7] (1 2)

Date: _____ MONTH [ ][ ] (3 4) DAY [ ][ ] (5 6)

What grade are you in _____ [ ][ ] (7 8)

Directions:	Please write the numbers that show how you feel in the boxes on the right.

1. In Project BACES, how much did you learn about jobs and careers?

I didn't learn anything — 1 2 3 4 5 — I learned a lot [ ] (9)

2. Has Project BACES made you think about trying a career that you weren't thinking about before?

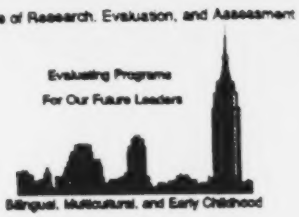
No, it has not made me think about a different career — 1 2 3 4 5 — Yes, it has made me think a lot about a different career [ ] (10)

3. Has participating in Project BACES made you enthusiastic about the career you plan to enter?

It hasn't made me enthusiastic — 1 2 3 4 5 — It has made me very enthusiastic [ ] (11)

Thank you for completing this form.

BILINGUAL, MULTICULTURAL, AND EARLY CHILDHOOD EVALUATION
OFFICE OF RESEARCH, EVALUATION, AND ASSESSMENT
NEW YORK PUBLIC SCHOOLS
110 LIVINGSTON STREET, ROOM 732
BROOKLYN, N.Y. 11201
(718) 935-3790


Office of Research, Evaluation, and Assessment
Evaluating Programs
For Our Future Leaders
Bilingual, Multicultural, and Early Childhood

Student Assessment
Spring 1993

Program: **Project BACES**

1 7
1 2

Directions: Please write the numbers that show how you feel in the boxes on the right.

1. Project BACES helped me keep in closer contact with my native culture.

   Did not help me at all |__|__|__|__|__| Helped me a lot
   1 2 3 4 5

   ☐ 3

2. By keeping in contact with my native culture, I will learn more about myself.

   Not true at all |__|__|__|__|__| Very true
   1 2 3 4 5

   ☐ 4

3. Because of Project BACES, I am more interested in continuing my education next year.

   NOT true at all |__|__|__|__|__| Very true
   1 2 3 4 5

   ☐ 5

4. Project BACES has helped me to do better in school.

   Did **NOT** help me at all |__|__|__|__|__| Helped me a lot
   1 2 3 4 5

   ☐ 6

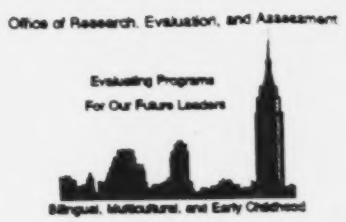
5. Project BACES has helped me understand the need to prepare for my future at at college or in a career.

   Did **NOT** help me at all |__|__|__|__|__| Helped me a lot
   1 2 3 4 5

   ☐ 7

Thank you for completing this form.

BILINGUAL, MULTICULTURAL, AND EARLY CHILDHOOD EVALUATION
OFFICE OF RESEARCH, EVALUATION, AND ASSESSMENT
NEW YORK PUBLIC SCHOOLS
110 LIVINGSTON STREET, ROOM 732
BROOKLYN, N.Y. 11201
(718) 935-3790


Office of Research, Evaluation, and Assessment
Evaluating Programs
For Our Future Leaders
Bilingual, Multicultural, and Early Childhood

Evaluación Estudiantil - Primavera 1993

1 7
1 2

Programa: **Proyecto BACES**

Instrucciones:	Por favor escriba los números que mejor representan cómo usted se siente en los recuadros a la derecha.

1. El Proyecto BACES me ha ayudado a mantener contacto con la cultura latina.

No me ha ayudado nada	1	2	3	4	5	Me ha ayudado mucho

☐ 3

2. El mantenerme en contacto con la cultura latina me ayudará a aprender más acerca de mí mismo(a).

No estoy de acuerdo	1	2	3	4	5	Estoy de acuerdo

☐ 4

3. Yo estoy más interesado(a) en continuar mis estudios el año que viene, gracias al Proyecto BACES.

No estoy más interesado(a)	1	2	3	4	5	Estoy mucho más interesado(a)

☐ 5

4. El Proyecto BACES me ha ayudado a mejorar en la escuela.

No me ha ayudado nada	1	2	3	4	5	Me ha ayudado mucho

☐ 6

5. El Proyecto BACES me ha ayudado a entender la importancia de asistir a la universidad o a un instituto vocacional para poder tener una carrera y un mejor futuro.

No me ha ayudado nada	1	2	3	4	5	Me ha ayudado mucho

☐ 7

Muchas gracias por completar este cuestionario.